

ABSTRACT

Leaks are detected in a vapor compression system using fluorescent and daylight visible *in situants* which are introduced to a system by way of a carrier and dissolved into the systems oil or lubricant. This invention teaches the use of POE oil as a universal carrier fluid, alone or in combination with an alcohol, and combined with one or more "*in situants*". The *in situants* are compounds which are the same or substantially similar to compounds already present in oils or lubricants. An on-off UV light source, such as a xenon light, can be used to visually detect the leak from the vapor compression system components.